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REMARKS

Applicants have considered the outstanding official action. It is respectfully submitted that the claims are directed to patentable subject matter as set forth below.

Initially, it is noted that non-elected claims 46-50 have been canceled. Applicants reserve the right to file a divisional application directed to the non-elected subject matter.

The Abstract of the disclosure is objected to because the Abstract should be in narrative form and limited to a single paragraph on a separate sheet. Applicants have placed the Abstract in a single narrative form paragraph on a separate sheet. Withdrawal of the objection to the Abstract is respectfully requested.

The drawings are objected to under 37 C.F.R. 1.83(a). The Examiner states that the drawings must show every feature of the invention specified in the claims and therefore, the following features must be shown or the feature(s) canceled from the claim(s): (1) "said at least one wheel is motorized" (claim 43); and (2) "said pressure member is positioned upstream of the winding member" (claim

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44). Applicants have amended the drawings to show these features therein. Applicants are submitting herewith new Figure 9 showing the at least one wheel motorized, i.e., motor 70 in relation to wheel 33. Applicants are also submitting new Figure 10 showing the pressure member 31 positioned upstream of the winding member 7. Applicants are also submitting Replacement Sheets for Figures 1-8 removing the drawing sheet numbers due to adding Figure 9 and Figure 10. No changes have been made to Figures 1-8. No new matter has been added. Withdrawal of the objection and acceptance of the replacement and new drawings are respectfully requested.

Applicants note the Examiner's indication that claim 36 is allowable if rewritten in independent form. Claim 36 has been rewritten in independent form and dependent claim 52 added. Rewritten independent claim 36 incorporates intervening claim 28/26, whereas dependent claim 52 incorporates intervening claim 28/27. Formal allowance of claims 36 and 52 is respectfully requested.

The pending rejections based on art are as follows:

- (1) Claims 26, 27, and 44 under 35 U.S.C. §102(b) over U.S. Patent No. 2,785,700 (Yovanovich);

- (2) Claims 28-30 under 35 U.S.C. §103(a) over Yovanovich in view of JP 11-333219 (Shinichi) or U.S. Patent No. 6,659,152 (Miyake);
- (3) Claims 31-33 and 43 under 35 U.S.C. §103(a) over Yovanovich in view of Shinichi or Miyake and further in view of U.S. Patent No. 2,776,698 (Kreger);
- (4) Claims 37-39 under 35 U.S.C. §103(a) over Yovanovich in view of Kreger;
- (5) Claims 34 and 35 under 35 U.S.C. §103(a) over Yovanovich in view of Shinichi or Miyake and further in view of JP 59-9044 (Keiichi);
- (6) Claims 40-42 under 35 U.S.C. §103(a) over Yovanovich in view of U.S. Patent No. 2,250,430 (Wade); and
- (7) Claim 45 under 35 U.S.C. §103(a) over Yovanovich in view of U.S. Patent No. 5,251,809 (Drummond).

Claim 26 is the sole independent claim. The primary reference in each rejection is Yovanovich. Each of the secondary references, i.e., Shinichi, Miyake, Kreger, Keiichi, Wade and Drummond, are applied with respect to a further limitation in the noted dependent claim(s).

Claim 26 claims a machine for producing a tubular product by helical winding and gluing of strips of web material. The machine comprises a mandrel, a winding member constructed and arranged to helically wind in an overlapping and staggered manner at least two strips of web material around the mandrel to form a tubular product, and at least one pressure member cooperating with the mandrel and, in combination with the winding member, disposed along a path of the tubular product being formed on the mandrel. The at least two strips of web material include an adhesive operatively applied on a surface thereof. The pressure member is constructed and arranged to exert pressure against the mandrel and thereby to the at least two strips of web material present on the mandrel to promote adhesion of the strips and form the tubular product.

Applicants also note that new claim 51, dependent on claim 26, has been added. Claim 51 further defines the pressure member as including at least one wheel; an actuator to stress the at least one wheel and the mandrel against each other; at least one supporting element for the mandrel, contrasting an action of the at least one wheel; wherein the at least one wheel and the supporting member are arranged around the mandrel such that the tubular product advances

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between the mandrel and the at least one wheel and the supporting element.

The primary reference Yovanovich discloses a core winder including a roller 47 arranged downstream of the winding belt 24. The outermost strip 8 has beveled edges 36 and 38 to which adhesive is applied (see column 2, lines 53-62). Beveled edges 36, 38 of the outermost strip 8 are softened by means of steam (see column 3, lines 4-10) to substantially a point of disintegration. The softened edges are then pressed against an inner strip by passing under the roller 47. The roller 47 is positioned to roll over overlapping edge 38 of the outer convolution 8. The pressure applied by the roller 47 serves to fuse the softened disintegrated edge to the underlying portion of the tube. (See column 3, lines 17-19). The tube is then coated with a fixative material to harden and polish the surface of the tube and to insure adherence of the outermost portions of the beveled edge 38 to the surface of its adjacent convolution. (See column 3, lines 44-46 and 52-54; column 4, lines 3-12 and 20-26).

The pressure exerted by applicants' claimed pressure member, based on the arrangement of the machine, is applied in a manner to improve the adhesion between mutually

superposed helically wound strips forming the tubular product. The pressure exerted against the mandrel by the pressure member enhances the effect of the adhesive applied to a surface of the at least two strips of web material. The purpose of the pressure and the pressure applied are therefore quite different as between that taught in Yovanovich and provided by the machine as claimed by applicants. Additionally, as to new claim 51, applicants' pressure member based on the claimed arrangement provides a reaction force to resist the stress applied by the wheel. This feature is not required in Yovanovich because the pressure applied by roller 47 of Yovanovich is negligible and does not require a reaction force. Thus, no basis is present to include a supporting element as claimed. Rather, Yovanovich teaches coating the exterior of the tube to insure adherence of the outermost portions of the edge to an adjacent convolution.

Accordingly, Yovanovich does not teach a machine as claimed wherein the pressure member promotes adhesion of at least two strips including adhesive to form a tubular product. Accordingly, Yovanovich does not teach each and every element of the invention as claimed within the meaning

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of 35 U.S.C. §102. Withdrawal of the §102 rejection is respectfully requested.

Yovanovich is also applied in combination with Shinichi or Miyake in rejecting dependent claims 28-30. Shinichi and Miyake are each relied on individually for teaching the additional limitations of dependent claims 28-30. Neither Shinichi nor Miyake make up for the shortcomings of Yovanovich. Yovanovich and Shinichi or Miyake do not suggest any motivation to modify the teachings of Yovanovich, Shinichi or Miyake in order to provide the machine as claimed.

More specifically as to Shinichi, Shinichi discloses an apparatus for winding a non-woven material to produce a filter. The winding gears 17, 18 as taught in Shinichi have the function of a winding belt of a core winder. The winding gears 17,18 are not a pressure member in combination with a winding member as in applicants' claimed machine. One skilled in the art would not look to Shinichi and conclude that the gears 17,18 as disclosed therein could be combined with the apparatus of Yovanovich and modified in such a manner as to provide applicants' claimed machine in view of the significant differences present, i.e., involves a different machine (a filter

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producing machine rather than a core winder), provides a different movement (cylindrical winding versus helical advancement and winding), and performs a different function (winding versus enhancing adhesion in the claimed machine).

The above is also true as to Miyake. Miyake also discloses an entirely different machine, i.e., a laminator, from that claimed by applicants. One skilled in the art of paper converting and core winders would not look to Miyake teaching a laminator to find useful teachings and suggestions to improve a core winder. The rollers and actuators in Miyake are used to press a film against a sheet material which is advanced in a flat form. No commonality is present as between this flat press lamination technique and core winding of at least two strips as provided by applicants' claimed machine to provide a tubular product in themselves and not laminated to another substrate. One skilled in the art would not combine a laminator with a core winder as asserted by the Examiner.

Accordingly, Yovanovich in combination with Shinichi or Miyake does not render the machine as claimed obvious within the meaning of 35 U.S.C. §103(a). Thus, withdrawal of the §103 rejection is respectfully requested.

Yovanovich is also applied in combination with Shinichi or Miyake and further in view of Kreger in rejecting dependent claims 31-33 and 43. Shinichi, Miyake and Kreger are relied on for teaching the additional limitations of dependent claims 31-33 and 43. Shinichi or Miyake do not make up for the shortcomings of Yovanovich as set forth above. Also, Kreger does not make up for the shortcomings of Yovanovich. Yovanovich, Shinichi, Miyake and Kreger do not suggest any motivation to modify the teachings of Yovanovich, Shinichi, Miyake or Kreger in order to provide the invention as claimed.

The primary reference Yovanovich discloses a limited pressure against a disintegrated edge of a strip of cardboard as set forth above. The secondary reference Kreger suggests to support and rotate a mandrel between opposing supporting elements. A person skilled in the art would not consider adding the supporting element of Kreger, i.e., pulleys 61, to the primary reference Yovanovich. One skilled in the art would not consider moving the (supporting member) pulleys 61 of Kreger to a different point in the apparatus, i.e., downstream of where the helical strip is wound around the mandrel 12 of Kreger.

Additionally, as evident from its function, the pulleys 61 of Kreger are arranged in order to act in direct contact with the mandrel. Conversely, in applicants' machine as claimed, the pressure member (including the wheel and the supporting element) is structured to act against the at least two strips wound around the mandrel.

Accordingly, Yovanovich in combination with Shinichi or Miyake and further in view of Kreger does not render the invention as claimed obvious within the meaning of 35 U.S.C. 103(a). Thus, withdrawal of the §103 rejection is respectfully requested.

Yovanovich is also applied in combination with Kreger in rejecting dependent claims 37-39. Kreger is relied on for teaching the additional limitations of dependent claims 37-39. Kreger does not make up for the shortcomings of Yovanovich as set forth above. Yovanovich and Kreger do not suggest any motivation to modify the teachings of Yovanovich or Kreger in order to provide the claimed machine.

The Examiner asserts that Kreger discloses a supporting element for the mandrel. The position and the function of the "supporting element 61" in Kreger is different than in applicants' machine as claimed. The

supporting element, i.e., pulleys 61, of Kreger has the function of supporting and rotating the tubular mandrel which in Kreger is part of the product to be manufactured. There is no pressure which the "supporting element 61" has to counter-act.

No basis is present for a person skilled in the art to consider combining Yovanovich and Kreger together when it is considered that no objective problem is present in the applied art which would constitute a pointer or suggestion for one skilled in the art to combine these references in a manner so as to achieve applicants' claimed machine. Accordingly, Yovanovich in combination with Kreger does not render the invention as claimed obvious within the meaning of 35 U.S.C. §103(a). Thus, withdrawal of the §103 rejection is respectfully requested.

Yovanovich is also applied in combination with Shinichi or Miyake and further in view of Keiichi in rejecting dependent claims 34 and 35. Shinichi, Miyake and Keiichi are relied on for teaching the additional limitations of dependent claims 34 and 35. Keiichi shows a plurality of rollers commonly supported. Shinichi or Miyake do not make up for the shortcomings of Yovanovich as set forth above. Also, Keiichi does not make up for the

shortcomings of Yovanovich. Yovanovich, Shinichi, Miyake or Keiichi do not suggest any motivation to modify the teachings of Yovanovich, Shinichi, Miyake or Keiichi in order to provide the invention as claimed. Accordingly, Yovanovich in combination with Shinichi or Miyake and further in view of Keiichi does not render the invention as claimed obvious within the meaning of 35 U.S.C. § 103(a). Thus, withdrawal of the § 103 rejection is respectfully requested.

Yovanovich is also applied in combination with Wade in rejecting dependent claims 40-42. Wade is relied on for teaching the additional limitations of dependent claims 40-42. Wade does not make up for the shortcomings of Yovanovich. Wade is directed to a process and machine for forming tubing by helically winding a heat sealable strip of material on a mandrel using a heated metal band. Pressure rollers are positioned near the end of a heating chamber so that the heated strips will be passed thereby prior to cooling. Yovanovich or Wade do not suggest any motivation to modify the teachings of Yovanovich or Wade in order to provide applicants' machine as claimed. Accordingly, Yovanovich in combination with Wade does not render the invention as claimed obvious within the meaning of 35 U.S.C.

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§103(a). Thus, withdrawal of the §103 rejection is respectfully requested.

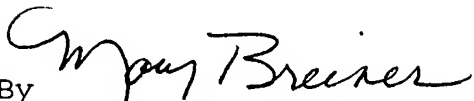
Yovanovich is also applied in combination with Drummond in rejecting dependent claim 45. Drummond is relied on for teaching the additional limitations of dependent claim 45. Drummond is directed to easy-open containers having a spirally wound body wall with overlapped edges having a temporary adhesive therebetween for releasably adhering the overlapped edges of the body wall. Drummond does not make up for the shortcomings of Yovanovich. Neither Yovanovich nor Drummond suggest any motivation to modify the teachings of Yovanovich or Drummond in order to provide the invention as claimed. Accordingly, Yovanovich in combination with Drummond does not render the invention as claimed obvious within the meaning of 35 U.S.C. § 103(a). Thus, withdrawal of the § 103 rejection is respectfully requested.

Reconsideration and allowance of the claims is requested.

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Respectfully submitted,

MAURO GELLI ET AL

By 
Mary J. Breiner, Attorney
Registration No. 33,161
BREINER & BREINER, L.L.C.
P.O. Box 320160
Alexandria, Virginia 22320-0160

Telephone: (703) 684-6885

Attachments - New Drawing Sheets ((2)-Figures 9 and 10)
- Replacement Sheets ((5)-Figures 1-8)